

Message

From: Simon, Michelle [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A5BCF673944B4F04BBE1EA3D564464E8-SIMON, MICHELLE]
Sent: 9/4/2018 7:05:28 PM
To: Murray, Regan [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=4b06d968152a4cefb83c9864ff5c89c6-Murray, Regan]
CC: Walling, Joyce [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=d2744bea983b425bb19cacc744239e9-Walling, Joyce]; Bowling, Charlena [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=4adb811a188e44568ff5c199312b5f3a-Bowling, Charlena]
Subject: RE: FOR REVIEW: Writeup on EPANET and SWMM for 2018 NRMRL Highlights Report

Regan,

I suggest removing the stuff in red and I will get them the FY18 download numbers in October.

Any changes from you?

Michelle

From: Walling, Joyce
Sent: Tuesday, September 04, 2018 1:31 PM
To: Simon, Michelle <Simon.Michelle@epa.gov>; Murray, Regan <Murray.Regan@epa.gov>
Cc: Bowling, Charlena <Bowling.Charlena@epa.gov>
Subject: FOR REVIEW: Writeup on EPANET and SWMM for 2018 NRMRL Highlights Report

Regan and Michelle,

Please review the writeup below on EPANET and SWMM summit and the models themselves that Char and I drafted for this year's NRMRL research highlights report. To develop this, we used information you provided about the summit and the weekly report item about it. We decided to make it a combined writeup to explain the summit and then include small paragraphs about each of the 2 models. We will get the annual download numbers after the FY is over.

Would you review and confirm it's accurate and let me know if something else should be added?

(This is last year's highlights report:

https://intranet.ord.epa.gov/sites/default/files/Feb%202018/nrmrl_fy17_research_highlights_final.pdf.)

Water Infrastructure Models - EPANET and SWMM

The Environmental & Water Resources Institute (EWRI) hosted two summits to frame a shared vision for the future development of NRMRL's EPANET and EPA Stormwater Management Model (SWMM). The invitees, representing the user, software developer, research, and regulatory community, recommended specific short term technical improvements and initiated discussions for the next generation of the water infrastructure models. NRMRL intends to actively use the open-source, community-development, agile approach for EPANET and SWMM development. While NRMRL will continue to develop water infrastructure code internally, it will accept code from the user community to efficiently develop code that the user community wants. Both modeling efforts will take advantage of 21st Century programming techniques to modernize the models, maximize their scientific accuracy, and simplify the data acquisition, processing, and interpretation of the results. Visioning committees within EWRI have been formed for each of the two models, and both have planned a series of "white papers" on the future of EPANET and SWMM.

Engineers and consultants use EPANET to design and size new water infrastructure, retrofit aging infrastructure, reduce energy usage, investigate water quality problems, model contamination threats, and evaluate resilience to security threats or natural disasters. Users downloaded EPANET over 60,000 times in FY18. Additionally, NRMRL scientists used EPANET to provide technical advice to the Office of Water, Ohio EPA, and local officials in Flint, MI, and other communities on water utility challenges such as contaminant fate and transport.

The Stormwater Management Model (SWMM) is used for single event or long-term simulations of water runoff quantity and quality in primarily urban areas, although there are many applications for drainage systems in non-urban areas. It is used throughout the world for planning, analysis, and design related to stormwater runoff, combined and sanitary sewers, and other drainage systems. SWMM was developed to help support local, state, and national stormwater management objectives to reduce runoff through infiltration and retention, and help to reduce discharges that cause impairment of our Nation's waterbodies. Users downloaded SWMM over xxxxx times in FY18.

Thank you.

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